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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/720,677 | 11/24/2003 | Yu-Fei Ma | MS1-1754US | 6266 |
| 22801 | 7590 | 05/04/2007 | EXAMINER | |
| LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201 | | | | LE, TUAN H |
| ART UNIT | | PAPER NUMBER | | |
| | | 2622 | | |
| NOTIFICATION DATE | | DELIVERY MODE | | |
| | | 05/04/2007 | | |
| | | ELECTRONIC | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lhptoms@leehayes.com

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/720,677 | MA ET AL. | |
| | Examiner | Art Unit | |
| | Tuan H. Le | 2622 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 March 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1-6 and 13-41 is/are allowed.
- 6) Claim(s) 7 is/are rejected.
- 7) Claim(s) 8-12 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 November 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date. _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the elected species filed on March 6, 2007, in which the applicant elected Species III and claims 1-4 and 6-41.

Specification

The disclosure is objected to because of the following informalities:

"Frame 402", "center portion 404", "border 406", "motion detection region 408" could not be located in Fig. 4.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Bhanu et al (U.S. Pat. 4,969,036).

Regarding **claim 7**, Bhanu et al discloses a method comprising: describing one or more camera motions (see Bhanu et al, Fig. 3, Fig. 34, column 5 lines 67-68, column 6 lines 1-4, 28-37, wherein a camera is rotated with respect to X, Y, and Z axes) that occurred when sequential frames (204) of a video were captured, (see Bhanu et al, Fig. 37, wherein camera 202 captures image sequences), the description for each said frame being provided by a set of displacement curves that describe the one or more camera motions in respective

horizontal (H), vertical (V), and radial (R) directions, (see Bhanu et al, Figs. 18a-18d, Figs. 19a-19d, column 6 lines 48-68, wherein equations and curves represent camera rotation); and

detecting camera shaking (a sequence of pan and tilt) in the video based on the described camera motions in the set of displacement curves (see Bhanu et al, column 8 lines 5-9 and 35-58, wherein the amount of camera pan and tilt rotation is measured).

Allowable Subject Matter

Claims 8-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-6, 13-41 are allowable.

The following is an examiner's statement of reasons for allowance:

The closest prior art Shahraray (U.S. Pat. 6,211,912) suggests a method for detecting inter-shot scene changes resulting from camera operations such as panning, tilting, and zooming. In one particular example, Shahraray discloses that camera motion is decomposed into pan, tilt, or zooming component. In another example, Shahraray discloses that camera motion is decomposed into all three of these components.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Qian et al (U.S. Pat. 6,721,454) discloses a method of detecting an event in a video comprising the steps of analyzing the content of the video; summarizing the analysis; and inferring an event from the summary. The video event detection process is, thus, decomposed into three modular levels. As a result, the method detects events which are meaningful to a video user and the method may be extended to a broad spectrum of video domains by incorporating shot summarization and event inference modules that are, relatively, specific to the domain or subject area of the video which operate on data generated by visual analysis processes which are not domain specific.

Mory (U.S. Pat. 7,010,036) discloses a descriptor for the representation, from a video indexing view point, of motions of a camera or any kind of observer or observing device within any sequence of frames in a video scene, said motions being at least one or several of the following basic operations: fixed, panning (horizontal rotation), tracking (horizontal transverse movement), tilting (vertical rotation), booming (vertical transverse movement), zooming (changes of the focal length), dollying (translation along the optical axis), and rolling (rotation around the optical axis), or any combination of at least two of these operations.

Warmick et al (U.S. Pat. 6,606,409) discloses a method for performing content-based temporal segmentation of video sequences, the method comprises the steps to transmitting the video sequence to a processor,

identifying within the video sequence a plurality of type-specific individual temporal segments using a plurality of type-specific detectors; analyzing and refining the plurality of type-specific individual temporal segments identified in the identifying the plurality of type-specific individual temporal segments step; and outputting a list of locations within the video sequence of the identified type-specific individual temporal segments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Le whose telephone number is (571) 270-1130. The examiner can normally be reached on M-Th 7:30-5:00 F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tuan Le
April 30, 2007.



DAVID OMETZ
SUPERVISORY PATENT EXAMINER